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| APPLICATION NO.                                                                  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.          | CONFIRMATION NO. |
|----------------------------------------------------------------------------------|-------------|----------------------|------------------------------|------------------|
| 10/627,267                                                                       | 07/24/2003  | Shigekatu Sato       |                              | 7602             |
| 7590                                                                             | 05/17/2004  |                      |                              |                  |
| Shigekatu Sato<br>3-7-7, Katahira<br>Asao-Ku<br>Kawasaki-City, 215-0023<br>JAPAN |             |                      | EXAMINER<br>REDDICK, MARIE L |                  |
|                                                                                  |             |                      | ART UNIT<br>1713             | PAPER NUMBER     |
| DATE MAILED: 05/17/2004                                                          |             |                      |                              |                  |

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                                      |                                        |  |
|------------------------------|--------------------------------------|----------------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/627,267 | <b>Applicant(s)</b><br>SATO, SHIGEKATU |  |
|                              | <b>Examiner</b><br>Judy M. Reddick   | <b>Art Unit</b><br>1713                |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 February 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☒ Claim(s) 1-4 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |                                                                                                                        |                                                                                         |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                            | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

**DETAILED ACTION**

**Priority**

1. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Japan on 08/05/02. It is noted, however, that applicant has not filed a certified copy of the H14-226801 application as required by 35 U.S.C. 119(b).

**Specification**

2. The abstract of the disclosure is objected to because "ABSTRACT" should be corrected to "ABSTRACT". Correction is required. See MPEP § 608.01(b).
3. 35 U.S.C. 112, first paragraph, requires the specification to be written in "full, clear, concise, and exact terms." The specification is replete with terms that are not clear, concise and exact. The specification should be revised carefully in order to comply with 35 U.S.C. 112, first paragraph. Examples of some unclear, inexact or verbose terms, incomplete sentences and improperly hyphenated words used in the specification are: As to the improperly hyphenated words, on page 1 @ line 24, "mo-lding" and @ line 31, "electr-ical", on page 2 @ line 13, "produ-ct's", @ line 17, "infl-uence", on page 3 @ line 19, "obt-ained", @ line 27, "bleedi ng", @ line 33, "conta-ining", On page 4 @ line 7, "che-mical", and @ line 23, "compou-nd", etc.(see also pages 19-36); As to the misspelled words, on page 2 @ line 21, "practiced" should read "practices", on page 4 @ line 17, "buthyl" should read "butyl", "penthyl" should read "pentyl", @ line 18, "octhyl" should read "octyl", @ line 21, "eater" should read "ester", on page 10 @ line 3, "thr" should read "the", @ lines 13 & 19, "prefavable" should read "preferable", etc.(see also pages 19-36); As to sentences and paragraphs that are grammatically deficient, on page 2 @ lines 4-9 & 10-15, on page 3, @ line 7, "worse" should read "worsen", @ line 9, "is" should read "are" and on page 3 @ lines 24-28, etc.(see also pages 19-36). Furthermore, the margins are not consistently uniform. A substitute specification for the substitute specification filed on 02/17/04, excluding the claims, is required pursuant to 37 CFR 1.125(a) because the substitute specification(02/17/04) is replete with errors as set forth supra.

A substitute specification filed under 37 CFR 1.125(a) must only contain subject matter from the original specification and any previously entered amendment under 37 CFR 1.121. If the substitute specification contains additional subject matter not of record, the substitute specification must be filed under 37 CFR 1.125(b) and (c)

4. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

5. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: The specification, as far as the Examiner can tell, does not provide proper antecedent basis for "0.1-10 parts by weight of an amino group containing compound" per claim 4 (C). See page 23, lines 27-32.

#### Claim Objections

6. Claims 1-4 are objected to because of the following informalities: In claim 1 @ line 8, it is suggested that the indefinite article "a" be inserted before "hydrocarbon"; In claim 2 @ line 2, it is suggested that "which" be deleted and "an" be inserted before "amino"; In claim 3 @ line 2, "comprizing" should read "comprising", @ lines 3-4, "thermopla-stic" should read "thermoplastic" or "thermoplas-tic" and @ line 4, the conjunctive "and" should be inserted after "resin"; In claim 4 @ line 2, "which" should be deleted, @ line 4, "an" should be inserted before "amino" and @ line 5, a "hyphen" should be inserted between "group" and "containing". Appropriate correction is required.

#### Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 1-5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A) The recited "general formula (1)" per claim 1 constitutes indefinite subject matter as per it not being readily apparent if or how said objectionable term "general" further limits the claims, said term being relative and not absolute.

B) The recited "selected from group consisting of hydrogen and hydrocarbon group" per claim 1 constitutes indefinite subject matter as per the use of language inconsistent with proper Markush terminology, i.e., the definite article "the" should be inserted between "from" and "group". When materials recited in a claim are so related as to constitute a proper Markush group, they should be recited in the conventional manner, or in the alternative. For example, "wherein R is a material selected from the group consisting of A, B, C and D" is a proper limitation, or alternatively, "wherein R is A, B, C or D" is also proper. See M.P.E.P. § 2173.05(h).

C) The recited "positive integers independently from 0 to 30 whose sum is from 6 to 80" per claim 1 constitutes indefinite subject matter as per it not being readily ascertainable as to how "0" further limits the antecedently recited "positive integers". Further, the recited "whose sum is from 6 to 80" engenders awkwardly expressed claim language. The following language is suggested, "wherein a, b, c, d, e and f, independently, are integers from 0 to 30 with the proviso that the sum of  $a + b + c + d + e + f$  is from 6 to 80".

D) The recited "An antistatic plastic resin formed product made by said plastic resin composition" per claim 5 engenders awkwardly expressed and confusing claim language.

#### Double Patenting

9. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or

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improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

10. Claims 1-5 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-3 of copending Application No. 10/627,266 as evidenced by Nunn, Jr. et al. Although the conflicting claims are not identical, they are not patentably distinct from each other because the antistatic agent characterized as containing a borate ester of polyoxyalkylene expressed by the formula (1)(claim 1), the antistatic agent according to claim 1, further comprising an amino group-containing compound(claim 2), an antistatic plastic resin composition characterized as comprising (a) 100 parts by weight of a thermoplastic resin and (B) 0.1-10 parts by weight of an antistatic agent described in claim 1(claim 3), an antistatic plastic resin composition according to claim 3, further comprising (C) 0.1-10 parts by weight of an amino group containing compound(claim 4) and an antistatic plastic resin formed product(claim 5) per the instant claims overlaps in scope with the resin composition for purging away contaminant in a plastic processing machine comprising (A) 100 parts by weight of a thermoplastic resin and (B) 0.1-10 parts by weight of a borate ester of polyoxyalkylene expressed by the formula (1)(claim 1), a resin composition, further comprising (C) 0.1-10 parts by weight of an amino group-containing compound(claim 2) and a purging method using the resin composition of claim 1(claim 3) per the claimed invention of copending application 10/627,266. A formed product from the resin composition of copending application 10/627,266 would have been obvious to the skilled artisan and with a reasonable expectation of success. The use of the claimed invention of copending '266 as an antistatic agent would be expected since the components of the invention, as claimed, per copending '266 are essentially the same as the components of the borate ester of



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polyoxyalkylene-containing antistatic agent per the instantly claimed invention and as evidenced by Nunn, Jr. et al who teach polyalkyleneoxy borates overlapping in scope with the borate ester of polyoxyalkylene per the claimed invention of copending '266 and the use thereof as an antistatic agent. This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

**Claim Rejections - 35 USC § 102**

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claim 1 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Nunn Jr., et al (U.S. 3,316,287) or Nunn Jr., et al (GB 1,090,565). Nunn Jr., et al '287 and Nunn Jr., et al (GB '565) teach organic polyalkyleneoxy borates, useful as antistatic agents, characterized by the following general formula:

$[R-O-CH_2CH(R_1)_0]_m-1-(CH_2CH_2O)_n-3-B$  wherein R represents at least one member of the group consisting of either a straight or branched chain alkyl radical containing from 10 to 28 carbon atoms, e.g., decyl, hendecyl, dinonyl, dodecyl, tridecyl, tetradecyl, pentadecyl, hexadecyl, heptadecyl, octadecyl, nonadecyl, eicosyl, etc.- which are unsubstituted or substituted by a chloro or dichloro mono-, di- or tri-alkyl of from 1 to 18 carbon atoms, e.g.,

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dimethylphenyl, dipropylphenyl, nonylphenyl, dinonylphenyl, octadecylphenyl, trioctadecylphenyl, etc., R1 represents either hydrogen methyl, ethyl, phenyl or cyclohexene oxide and m and n represent a positive integer of from 1 to 150. See col. 1, lines 10-72, col. 2, lines 1-34, the Runs and claims of Nunn Jr., et al'287 and page 1, lines 6-40, page 2, lines 1-30, the Runs and claims of Nunn Jr., et al(GB'565). Nunn Jr., et al'287 and Nunn Jr., et al(GB'565) therefore anticipate the instantly claimed invention.

Even if it turns out that the claimed invention is not anticipated by the disclosures of Nunn Jr., et al'287 and Nunn Jr., et al(GB'565), it would have been obvious to the skilled artisan to extrapolate, from the disclosures of Nunn, Jr. et al'287 and Nunn Jr., et al(GB'565), the antistatic agent, as claimed, as per such having been within the purview of the general disclosures of Nunn Jr., et al'287 and Nunn Jr., et al(GB'565) and with a reasonable expectation of success.

#### Conclusion

14. The prior art to Askew et al(U.S. 4,141,851), Tanizaki et al(U.S. 4,298,488), Askew et al(U.S. 4,450,087) and Toshimichi et al(JP61-083293), listed on the attached FORM PTO 892, is cited as of interest in teaching borate ester compounds which appear to overlap in scope with the claimed borate ester compound. A rejection in the future, based on this prior art, may be made. However, since a valid rejection is outstanding on this record, a rejection at this time is not being made. The remaining prior art listed on the attached FORM PTO 892 is cited as of being illustrative of the general state of the art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Judy M. Reddick whose telephone number is (571)272-1110. The examiner can normally be reached on Monday-Friday, 6:30 a.m.-3:00 p.m..

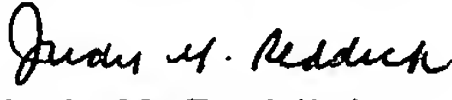
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (571)272-1114. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Judy M. Reddick  
Primary Examiner  
Art Unit 1713

JMR *JMR*  
05/02/04